

(Translation)

## PATENT COOPERATION TREATY

From the  
INTERNATIONAL PRELIMINARY EXAMINING AUTHORITY

To:

ODAJIMA PATENT OFFICE  
Attn. Heikichi ODAJIMA  
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**PCT**

WRITTEN OPINION

(PCT Rule 66)

Applicant's or agent's file reference <b>K-83CARBIDE</b>		Date of mailing (day/month/year) <b>13. 04. 2004</b>
International application No. <b>PCT/JP03/08597</b>		REPLY DUE within <b>2</b> months/days from the above date of mailing
International filing date (day/month/year) <b>07. 07. 2003</b>	Priority date (day/month/year) <b>08. 07. 2002</b>	
International Patent Classification (IPC) or both national classification and IPC <b>Int. Cl<sup>7</sup> G09F13/04</b>		
Applicant <b>Nippon Carbide Kogyo Kabushiki Kaisha</b>		

1. This written opinion is the <u>1</u> (first, etc.) drawn by this International Preliminary Examining Authority.	
2. This opinion contains indications relating to the following items:	
I <input checked="" type="checkbox"/>	Basis of the opinion
II <input type="checkbox"/>	Priority
III <input type="checkbox"/>	Non-establishment of opinion with regard to novelty, inventive step and industrial applicability
IV <input type="checkbox"/>	Lack of unity of invention
V <input checked="" type="checkbox"/>	Reasoned statement under Rule 66.2(a)(ii) with regard to novelty, inventive step or industrial applicability; citations and explanations supporting such statement
VI <input type="checkbox"/>	Certain documents cited
VII <input type="checkbox"/>	Certain defects in the international application
VIII <input type="checkbox"/>	Certain observations on the international application
3. The applicant is hereby invited to reply to this opinion.	
When?	See the time limit indicated above. The applicant may, before the expiration of that time limit, request this Authority to grant an extension, see Rule 66.2(d).
How?	By submitting a written reply, accompanied, where appropriate, by amendments, according to Rule 66.3. For the form and the language of the amendments, see Rules 66.8 and 66.9.
Also	For an additional opportunity to submit amendments, see Rule 66.4. For the examiner's obligation to consider amendments and/or arguments, see Rule 66.4bis. For an informal communication with the examiner, see Rule 66.6.
If no reply is filed, the international preliminary examination report will be established on the basis of this opinion.	
4. The final date by which the international preliminary examination report must be established according to Rule 69.2 is: <u>08. 11. 2004</u>	

Name and mailing address of the IPEA/ Japan Patent Office, 4-3, Kasumigaseki 3-chome, Chiyoda-ku, Tokyo 100-8915 Japan Facsimile No.	Authorized officer <b>Naoki MATSUKAWA</b> Telephone No. <b>03-3581-1101 Ext. 3264</b>
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## WRITTEN OPINION

International application No.

PCT/JP03/08597

## I. Basis of the opinion

## 1. With regard to the elements of the international application:\*

- ☒ the international application as originally filed
- ☐ the description:  
pages \_\_\_\_\_, as originally filed  
pages \_\_\_\_\_, filed with the demand  
pages \_\_\_\_\_, filed with the letter of \_\_\_\_\_
- ☐ the claims:  
pages \_\_\_\_\_, as originally filed  
pages \_\_\_\_\_, as amended (together with any statement) under Article 19  
pages \_\_\_\_\_, filed with the demand  
pages \_\_\_\_\_, filed with the letter of \_\_\_\_\_
- ☐ the drawings:  
pages \_\_\_\_\_, as originally filed  
pages \_\_\_\_\_, filed with the demand  
pages \_\_\_\_\_, filed with the letter of \_\_\_\_\_
- ☐ the sequence listing part of the description:  
pages \_\_\_\_\_, as originally filed  
pages \_\_\_\_\_, filed with the demand  
pages \_\_\_\_\_, filed with the letter of \_\_\_\_\_

## 2. With regard to the language, all the elements marked above were available or furnished to this Authority in the language in which the international application was filed, unless otherwise indicated under this item.

These elements were available or furnished to this Authority in the following language \_\_\_\_\_ which is:

- ☐ the language of a translation furnished for the purposes of international search (under Rule 23.1(b)).
- ☐ the language of publication of the international application (under Rule 48.3(b)).
- ☐ the language of the translation furnished for the purposes of international preliminary examination (under Rules 55.2 and/or 55.3).

## 3. With regard to any nucleotide and/or amino acid sequence disclosed in the international application, the written opinion was drawn on the basis of the sequence listing:

- ☐ contained in the international application in printed form.
- ☐ filed together with the international application in computer readable form.
- ☐ furnished subsequently to this Authority in written form.
- ☐ furnished subsequently to this Authority in computer readable form.
- ☐ The statement that the subsequently furnished written sequence listing does not go beyond the disclosure in the international application as filed has been furnished.
- ☐ The statement that the information recorded in computer readable form is identical to the written sequence listing has been furnished.

4. ☐ The amendments have resulted in the cancellation of:

- ☐ the description, pages \_\_\_\_\_
- ☐ the claims, Nos. \_\_\_\_\_
- ☐ the drawings, sheets/fig \_\_\_\_\_

5. ☐ This opinion has been drawn as if (some of) the amendments had not been made, since they have been considered to go beyond the disclosure as filed, as indicated in the Supplemental Box (Rule 70.2(c)).

\* Replacement sheets which have been furnished to the receiving Office in response to an invitation under Article 14 are referred to in this opinion as "originally filed."

WRITTEN OPINION

International application No.

PCT/JP03/08597

V. Reasoned statement under Rule 66.2(a)(ii) with regard to novelty, inventive step or industrial applicability; citations and explanations supporting such statement

1. Statement

Novelty (N)	Claims	2-5, 7-8	YES
	Claims	1, 6, 9	NO
Inventive step (IS)	Claims		YES
	Claims	1-9	NO
Industrial applicability (IA)	Claims	1-9	YES
	Claims		NO

2. Citations and explanations

Document 1: WO 98/53348 A1 (Thomas H. McGaffigan), 26 November, 1998 (26.11.98)

Document 2: EP 1136847 A2 (Nippon Carbide Kogyo Kabushiki Kaisha), 26 September, 2001 (26.09.01)

Document 3: JP 9-291280 A (Toshiba Corp.), 11 November, 1997 (11.11.97)

Document 4: WO 99/04604 (Minnesota Mining and Manufacturing Co.), 28 January, 1999 (28.01.99)

Claims 1, 6, 9

A retroreflective, internally illuminated sign comprising an information display section having cylindrical shape and an illuminator which is a back-projector type illuminator or a side-projector type illuminator, in which a large number of prismatic retroreflective elements are arranged in close contact with each other to form a continuous retroreflective plane whose retroreflecting part on the back has no bonded part with other layers, is disclosed in Document 1.

Claims 2, 3, 8

Document 2 discloses prismatic retroreflective elements which are triangular-pyramidal cube-corner elements and are arranged in the closest packed state as V-formed grooves having substantially symmetrical cross-sections intersect each other; and the light emitted from an illuminator enters from the back of the prismatic retroreflective elements at a prescribed angle of entrance. A person skilled in the art can easily combine these disclosures of Document 2 with the construction of Document 1.

Claims 4, 5

A sign in which the daylight color of the information display section is fluorescent color and the fluorescent index YF neither equals to or is more than a prescribed value is disclosed in Document 3. It is easy for a person skilled in the art to combine it with the construction of Document 1.

Claim 7

An illuminator based on the principle of electroluminescence as a back-projector type illuminator is disclosed in Document 4. It is easy for a person skilled in the art to combine it with the construction of Document 1.